

## ABSTRACT

A semiconductor device includes a semiconductor substrate, an insulating film, and a fuse element. The semiconductor substrate includes main and back surfaces and a trimming opening penetrating therethrough from the back surface to the main surface. The insulating film is formed on the semiconductor substrate. The fuse element is formed on the main surface of the semiconductor substrate through the insulating film at a position facing the trimming opening. A method of manufacturing a semiconductor device includes the steps of forming a fuse element and forming a trimming opening. The forming step forms the fuse element on a main surface of a semiconductor substrate through an insulating film. The forming step forms the trimming opening from a back surface of the semiconductor substrate to the main surface of the semiconductor substrate at a position facing the fuse element after a formation of the fuse element.